# Meeting of the NOAA Science Advisory Board's Environmental Information Services Working Group (EISWG)

# Sausalito, CA November 3-4, 2010

# **MEETING SUMMARY**

The third meeting of the NOAA Science Advisory Board's (SAB) Environmental Information Services Working Group (EISWG) was held November 3-4, 2010, at Cavallo Point in Sausalito, California. Co-Chairs, Walter Dabberdt and Nancy Colleton, led the discussions, which are summarized in the following pages.

Meeting attendees included:

#### EISWG Members

- Philip Ardanuy, Raytheon
- Nancy Colleton, Institute for Global Environmental Strategies (Co-Chair)
- Walter Dabberdt, Vaisala (Co-Chair)
- Eric Grimit, 3TIER
- Jeffrey Lazo, NCAR SIP
- Ronald McPherson, AMS
- Barry Myers, AccuWeather
- Peter Neilley, The Weather Channel
- Warren Qualley, Harris Corporation
- Joel Widder, Oldaker
- Julie Winkler (University of Michigan)

#### SAB Liaison

• Raymond Ban, The Weather Channel

# NOAA Participants

- Cynthia Decker, Executive Director, SAB
- Paul Doremus (NOAA, Planning, Programming and Integration)
- Edward Johnson (NOAA NWS)
- Jennifer Sprague (NOAA NWS)

The following agenda items and presentations were discussed and delivered on Wednesday, November 3 and Thursday, November 4 (*in order*):

## Welcome

Walt Dabberdt (EISWG Co-Chair) Nancy Colleton (EISWG Co-Chair) Cynthia Decker (SAB Executive Director) Presentation: NOAA Next Generation Strategic Plan - Status Update

Paul Doremus, Director of Strategic Planning, NOAA Planning, Programming and Integration

Presentation: NWS Strategic Plan – Status Update

Edward Johnson, Director of Strategic Planning and Policy, NWS

Presentation: NWS Documents: 1) Science & Technology Roadmap, 2) Services

Implementation Plan – Status Update

Edward Johnson, Director of Strategic Planning and Policy, NWS

Presentation: NWS Five Year Review of Partnership Policy – Status Update

Edward Johnson, Director of Strategic Planning and Policy, NWS

Presentation: NOAA Climate Service and the Role of CWG/EISWG

Subgroup Members: Ron McPherson, Kelly Redmond, John Toohey-Morales & Bob

Winokur

Working Lunch: Open Weather Service Concept

Peter Neilley & Philip Ardanuy

**Presentation: Communication Technologies** 

Subgroup Members: Phil Ardanuy, Warren Qualley, Joel Widder, Jeff Lazo & Barry Myers

Presentation: Environmental Information vs Environmental Impact Information

Subgroup Members: Warren Qualley, Barry Myers, and Peter Neilley

**Presentation: 4D Weather Cube** 

Ron McPherson, Kelly Redmond, John Toohey-Morales & Bob Winokur

**Discussion: AWIPS 2** 

Phil Ardanuy

Working Lunch: NESDIS Strategic Plan and Overview

Philip Ardanuy

Discussion Summary—November 3, 2010 & November 4, 2010

In addition to the presentations, the participants discussed EISWG Membership and the replacement for Bruce Baughman (*Appendix A*), EISWG meeting and travel logistics, including 2011 meetings and set forth a list of a prioritized set of actions (*Appendix B*).

# **November 3, 2010**

8:30 Breakfast/Welcome

Walt Dabberdt and Nancy Colleton (EISWG Co-Chairs)

# Cynthia Decker (SAB Executive Director)

- Colleton reported meeting with DOC Secretary on environmental information.
- Ban thanked the EISWG members for their efforts and noted that the SAB meeting will be held in Washington, D.C. from November 30<sup>th</sup> and December 1st. SAB Member, Eric Barron (Florida State University) will provide an update of the SAB's review of the current Working Groups structure and how they relate to the goals and missions outlined in the NOAA Next-Generation Strategic Plan Ban also noted each working group will provide update at future SAB meetings.
- Dabberdt stated that although the EISWG has been focusing on NWS, should the working group reach out to the other line offices and develop mechanisms to receive and provide feedback.
- Dabbert also stressed the need to ensure NWS leadership engagement at future EISWG meetings. (ACTION: Johnson to help facilitate by checking calendars, etc.). Proactive vs. Reactive: presentations by subgroups will help us be proactive.
- It was also noted that there is a vacancy on the EISWG, as Bruce Baughman resigned in July. The SAB recommended to fill that particular spot with an academic representative.. Ed Johnson noted that Baughman's expertise was in the area of emergency management.
- Decker: Coordinate/Engage with other working groups is key.

# 9:00 Status Update: NOAA Next Generation Strategic Plan (NGSP)

- Paul Doremus updated the group on the NGSP thanking the EISWG for their comments and suggested revisions.
- He also noted that Secretary Locke is showing aggressive leadership on performance measurement, so the EISWG comments in this regard were consist with the Agency's overall focus.
- Doremus also stated that the NOAA Administrator has the final approval of changes to the NGSP
- The group discussed whether new fiscal constraints will impact the
  operating plans being put forward by the various line offices. The
  participants agreed that the challenge will be how best to use existing
  resources and capabilities across all of NOAA and building the business
  case for new initiatives.
- Ban noted that the opportunity for productivity gains will be key in the new fiscal environment.
- Widder added that public and private partnerships will also grow in importance.
- Dabberdt asked whether new partnerships could be addressed in the Partnership Policy?.

Johnson reported that the NOAA Plan is further down the road than the NWS Strategic Plan. This was purposeful. Major change btw last two versions is the notion of the 4D cube, which was "too jargony" and attempted to change to a more functional description. Hope to pass out final copy at AMS.

- Matching phrases with NOAA Strategic Plan. Discussion of semantics and definitions. 5 year vs. 10 year horizon. Purposeful. Changes country needs NWS to make will take time. More intentionally aspirational.
- Neilley: Do you see the 1<sup>st</sup> 3 bullets building upon each other? Interpreting info is only delivered to the key decision makers? Interpretive services our people help decision makers make better decisions. Impact on society, boundaries when we talk to outside individuals.
- Ardanuy: 3<sup>rd</sup> goal is climate services "understand and adapt." Missing a void, "understand, adapt and avoid," would be a stronger service. Add coastal inundation in impact based.
- Ban: Intermediaries and Direct-contact and users, including concept of intermediaries, soften to be more inclusive, by direct user contact and intermediary.
- Myers: Set forth example of cement mixer/layer to explain what DSS should mean. Understanding users.
- 4D Cube language will be functionalized.
- Add health sector as a partner, renewable energy, etc.
- Interaction with EISWG...we are seeking interaction
- Dabberdt: Strategic Plan needs to recognize the boundary and state so
- Colleton: EISWG to recommend to the SAB that NOAA undertake a rigorous and qualitative assessment to establish baseline. **ACTION:** Work on formal language for a recommendation to the SAB.
- Ban: Johnson to develop framework
- 10:15 Discussion: Upcoming NWS Documents: 1) Science & Technology Roadmap, 2) Services Implementation Plan

Ed Johnson

- Colleton: Schedule for S&T Roadmap and Services and how can EISWG participate? A: Late Spring.
- Ban: Realistic to the economic environment?
- 10:45 Break
- 11:00 Discussion: Five Year Review of Partnership Policy *Ed Johnson* 
  - Neilley: Principal conduit or one of the conduits? Hoping EISWG would be the principal conduit.
  - Ban: Any recommendation from SAB to NOAA has to be responded to by NOAA. EISWG SAB NOAA, NOAA is required to respond.
  - Dabberdt: Formal advice or dialogue? Any limitations from soliciting info from broader community?

- Grimit: Look at notes from November 2009 regarding how to conduct partnership policy.
- Colleton: **ACTION:** 1) Wait to hear from Ed about other line office implementation of the Policy, 2) Ray to bring up at November 30 SAB Meeting, 3) Walt/Nancy to draft strategy on how to support review and look at strategy to see how this fits with EISWGs work plan. Due Date: Mid-December

# 11:30 EISWG Subgroup Presentation: NOAA Climate Service and the Role of CWG/EISWG

Subgroup Members: Ron McPherson, Kelly Redmond, John Toohey-Morales & Bob Winokur

- Regardless of political landscape, there will be climate services produced and it would be wise to be mindful of the boundaries.
- Recommendation that EISWG review and comment on NAPA report.
- Dabberdt: Put this discussion on the back burner, until the new House is seated and gives indication of its intention towards a NOAA Climate Service.
- Ban: CWG has expressed a concern over an out of balance leaning towards climate change vs seasonal, decadal, etc. November 30 discussion will highlight/address.
- Dabberdt: Need to ensure we have a framework in place before we move forward.
- Colleton: Is there a specific issue that EISWG should be looking at with regard to CWG. ACTION: Ron/Walt/Nancy to check with Tom Karl, Tony Busalucci, Ferris Webster on what they think EISWG should focus. ACTION: Have CWG and DAARWG speak to EISWG in April based on call.

# 12:30 Working Lunch: Open Weather Service Concept Peter Neilley & Philip Ardanuy lead

- Think about demonstration capabilities and facilities in a broad manner. Should be "rolling things new" across Enterprise, but need to be open to collaboration with Enterprise. Exception with belief that NWS receives more information than outside folks. Limitations within NWS as well. Develop shared vision of more rapid development across Enterprises of new products and services that takes advantage of new technologies.
- **ACTION:** Ardanuy to circulate the "Open Weather" slide deck to send to EIWSG. **ACTION:** Develop white paper on "Open Weather." Due Date: February 28, 2011. **ACTION:** Discuss with DAARWG/CWG. Act on it at the April 2011 EISWG meeting.
- Dabberdt: Be mindful of NCEP review.
- 1:30 EISWG Subgroup Presentation: Communication Technologies
  Subgroup Members: Phil Ardanuy, Warren Qualley, Joel Widder, Jeff Lazo &
  Barry Myers

- Widder: Get recipient of a message to act or do something. Achieve measurable outcome. Review, assessment, set of recommendation to help NOAA take better advantage of emerging technologies.
- Qualley: Technology impacts vs. Social impacts. Determined task was weighted towards technology.
- Next steps: Forces us to go beyond NWS. NOAA focus. **ACTION:** Have CIO or Office of Communications attend April 2011 Meeting
- Doremus: Rapid communication of science with no refinement in the information provided.
- Myers; Challenge in info going out to the public and what dissemination technology used. (public access website, mobile apps) What is the appropriate use of the technologies.
- Johnson: Rapid development of emerging technologies, challenging from a resource standpoint. How are we dealing with wireless weather information on NWS Partners Mtg.
- **ACTION:** Briefing on emerging technologies and how they are being utilized at April Mtg.
- 2:00 Discussion: Environmental Information vs Environmental Impact Information Warren Qualley, Barry Myers, and Peter Neilley lead
  - Johnson: Risky to put down "specific" words/phrases that will stand the test of time.
  - Neilley: Revisiting because of the NWS Strategic Plan
  - Johnson: Attempted to improve the language, intent to NOT encroach on the private sector, however, maybe we are not clear enough.
  - **ACTION:** Subteam to review NWS Strategic Plan and make suggested changes.
  - Doremus: Statement of Value, statement of principal. Recommendation to make a statement that commits NWS to work with the private sector that increases value of NWS information. **ACTION:** Add language in the beginning that helps with signaling.
  - Ban: Intermediary inclusion: "users/partners to better exploit," etc. Use Sub Group as sounding board.
- 3:00 Discussion: 4D Weather Cube Define what the Cube is and how to exploit it properly. Develop governance mechanisms and partnering philosophies that may best enable and accelerative pervasive and enterprise-wide exploitation of the new Weather Information Data Base (WIDB).
  - Ardanuy: Confusion as to what level of priority 4D Weather Cube is receiving.
  - Qualley: Aviation to be prototype.
  - Johnson: If you want environmental information, you have to know where to look for it.
  - Doremus: An independent voice on 4D Weather Cube would be helpful. Most associated with aviation.
  - Ardanuy: Analogy of Amazon.com for products as an example

- **ACTION:** Support 4D Weather Cube and that it goes beyond Aviation/NextGen.
- Dabberdt: Would like to understand "what is under the hood" with regard to 4D weather cube.
- **ACTION:** Presentation on 4D Weather Cube. Provide to DAARWG in addition at April 2011 meeting.
- **ACTION:** Ardanuy/Qualley to "wordsmith" power point presentation.
- Real question: Should EISWG take a position on this?
- 3:30 Break
- 3:45 Discussion: EISWG Logistics:
  - EISWG Nominee for Academic Participation (solicit nominations prior to meeting)
    - **ACTION:** Get no more than two page bios on individuals from those EISWG members that put forth the names. Walt/Nancy to review and provide to EISWG to pick at April meeting.
    - Widder: Be thoughtful about process as this will set the tone for future nominations.
    - **ACTION:** Get someone as a liaison from the Hydrographic Services Panel (Ban & Decker)
  - EISWG Review of NOAA/NWS Documents
  - EISWG Website
    - Status of Public Website? Ability to put documents on the public-side
      off the SAB website. (ACTION: Decker and Sprague. Put documents
      for public consumption on SAB Website, in addition, to documents for
      review. Check with Kenney/Winer regarding "call for comments"
      documents. Documents that have been approved by NOAA leadership.
      (White paper on open access.)
- 4:45 Summary, Review of Actions, and Day 2 Overview
- 5:00 Adjourn
- 6:30 Dinner TBD

#### **November 4, 2010**

- 8:30 Breakfast/Welcome
- 8:45 Discussion: EISWG Logistics (continued from yesterday):
  - EISWG Travel Support
    - ACTION: Sprague/Johnson/Decker look into contractual support for meetings (Due Date: 04/1/10)
  - EISWG 2011 Meeting Dates

- o "Low Impact" Meeting at AMS (Breakfast at 7:00 a.m.)
- o Teleconference in early February (Open Access)
- Full meeting in March/April
  - Conflicting Meetings
  - SAB Meeting
  - **ACTION:** Dabberdt to do doodle poll
- Summer Meeting in conjunction with AMS Summer Community Mtg (see below)
- o Full meeting in November
- Summer 2011 EISWG Workshop
  - o One day workshop in conjunction with the AMS Summer meeting.
  - o Planning in place by AMS Meeting
- EISWG briefing at AMS Annual Meeting
  - o 15 minutes at AMS Partner Mtg.
- EISWG Planning SubCommittee
  - o Ron McPherson
  - o Eric Grimit
  - Warren Qualley
  - o Phil Ardanuy
  - o Peter Neilley
  - o Jeff Lazo
  - o Walter Dabberdt
  - Nancy Colleton
- 9:15 Status Update /Discussion:
  - Assessment of US Weather and Climate Enterprise
    - o **ACTION:** 1) Johnson to contact Roger Pielke 2) Johnson to talk with Jeff Lazo about the Economic & Weather Group, 3) Reach out to the Bureau of Economic Analysis
  - National Academy Science Study of NWS Modernization
    - o **ACTION:** Johnson to keep EISWG apprised of Study.

Ed Johnson

#### 10:15 Break

- 10:45 Discussion: AWIPS 2 Develop governance mechanisms and partnering philosophies that may best enable and accelerate the transition of new applications into NWS operations and the NWS AWIPS 2 decision support platform, and access to low-level data by academia and the private sector.
  - Technology Insertion
  - Rewritten. Open source set of code. Factor 2 reduction of code.
  - NAWIPS Ported into the AWIPS 2. Common platform. Look and feel of the functionality of AWIPS
  - NOAA NESDIS Star
  - Largest challenge: Governance
  - "AWIPS App Store"

- Testing phases. Schedule dictated by testing phases.
- Access to low level data
- **ACTION:** Walt/Nancy to reach out to DAARWG to ensure DAARWG is knowledgeable about AWIPS 2
- **Demonstration** at April 2011 Meeting
- ACTION: Keep topic on front burner.
- 12:00 Working Lunch: NESDIS Strategic Plan and Overview *Phil Ardanuy leads*
- 1:30 Discussion: EISWG Work Plan Review
  - Colleton kept running draft of "To Dos" for EISWG
- 3:00 Break
- 3:15 Open Discussion (including EISWG Discussion: Group tasking priorities, Setting Date, Location and Topics for next meeting)
  - Social Science
  - NOAA Climate Service & OAR Direction
    - o Review Spring Report from CWG
  - DWH
  - Healthy Oceans/Ecosystems
- 4:00 Wrap- up and Adjourn

# Appendix A

# Appendix B

#### **ACTION ITEMS**

# Working Group Meeting November 4, 2010

# Partnership Policy:

- 1. Johnson to obtain policy assessment from other NOAA line offices
- 2. Ban to determine if other WGS engagement is appropriate, possible
- 3. Colleton & Dabberdt to draft Strategy (include AMS, existing NOAA mechanisms)
- 4. Johnson to provide web links for Partnership Policy articles and background documents.

#### **NOAA Climate Service**

5. Colleton to organize telecon with Tom Karl, Chet Koblinsky, Tony Busalachi and Ferris Webster to see if there are any items that EISWG should be reviewing/addressing.

# Rapidly-Changing Technologies

6. Sprague--Organize briefing for next meeting by the NOAA Office of Communications or Stakeholder Engagement (Andy Winer).

#### Environmental Information vs. Environmental Impact

- 7. Qualley--Distribute draft statement to EISWG Members
- 8. Johnson--Look at strategic plan and determine how improve language regarding definitive boundary

# Clarifying Roles with sectors with Rapidly-Changing Needs

- 9. Colleton/Dabberdt—Determine if EISWG should comment on future work.
- 10. Develop EISWG values work statement.
- 11. EISWG identified current environment for discovery access and us of environmental info.

#### Open Weather Service Concept

- 12. Neilley/Develop white paper by January
- 13. EISWG tp Review in February
- 14. Contact with DAARWG & CWG
- 15. Neilly & Ardanuy to draft Recommendation for SAB March Meeting
- 16. TBD--Presentation for SAB March Meeting

#### 4D Weather Cube (Four Dimensional Environmental Database)

- 17. Coordinate with DAARWG/Webster to keep informed
- 18. Keep informed (presentation at next meeting)
- 19. Keep topic and decide for

### AMS January, Seattle

20. Walt to put out Google meeting to determine whether to convene an EISWG breakfast meeting on Thursday morning

# AMS Community Meeting--Summer Workshop (August 10-14, Boulder)

- 21. Colleton and Dabberdt to contact Veronica Johnson/AMS to explore possibility of a summer workshop at AMS Summer Community Mtg.in Boulder. Issues to be discussed to include the Partnership Policy, NWS S&T Roadmap, NWS Services Roadmap, and Open Weather Service Concept
- 22. Ron McPherson, Phil Ardanuy, Peter Neilley, Eric Grimit, Jeff Lazo, and Warren to participate.

# Roadmaps

- 23. Johnson to provide NWS Technology Roadmap
- 24. Johnson to provide NWS Services Roadmap

### Other:

- 25. Cynthia—EISWG Placeholder for March SAB Meeting
- 26. Cynthia—To report back regarding the HSRP
- 27. Cynthia—Operations document to Colleton & Dabberdt
- 28. Warren to forward the white paper on determining the value of weather and climate enterprise.
- 29. Ardanuy to organize AWIPS 2 demo for the spring meeting.
- 30. Ardanuy to coordinate with DAARWG/Ferris Webster
- 31. Gain better understanding of DAARWG status and focus.
- 32. Sprague/Colleton/Dabberdt--April Meeting—determine date and place
- 33. All—send possible April meeting conflicts to Walt.
- 34. Johnson—Determine NESDIS Strategic Plan
- 35. NESDIS more visible at EISWG (Chuck Wooldridge)
- 36. Membership—Colleton and Dabberdt to talk with less active members
- 37. Membership—Colleton and Dabberdt to determine vacancies

# Agenda Items for Next Meeting:

- NOAA SAB WG Focus for EISWG
- EISWG Candidate Nominations
- Open Weather Service Concept Way Forward
- Partnership Policy Update and Approach
- Communications/Stakeholder Engagement
- Summer Workshop Update
- NESDIS Presentation, budget outlook